

Nevada Division of Environmental Protection Bureau of Air Pollution Control Calendar Year 2013 Actual Production/Emission Reporting Spreadsheet for Mercury Emissions from the Precious Metals Mining Industry Cumulative Nevada Mercury Control Program (NMCP): Mercury Operating Permit To Construct (MOPTC) Data Submittals								
Pollutant ID	Production/Heat Rate	Production Units (eg. tons/yr)	Emissions Factor	Emissions Factor Units	HG Annual Emissions (lbs/yr)	Hours Operated	HG Co-Product (tons/yr)	Notes
Source: Newmont Mining Corporation - Twin Creeks Mine: AQOP AP1041-0723.01; MOPTC AP1041-2218								
System Description: Juniper Mill Electric Induction Furnace (S2.001/TU4.001 - 1 of 2, only one operates at a time)								
Hg	29.82	tpy	0.0000362	lbs/hr	0.0139	383	0.0000	Induction Furnace emissions factor derived from 2013 M29 stack test.
System Description: Juniper Mill Electric Induction Furnace (S2.001.1/TU4.002 - 1 of 2, only one operates at a time)								
Hg	27.08	tpy	0.0000698	lbs/hr	0.0467	669	0.0000	Induction Furnace emissions factor derived from 2013 M29 stack test.
System Description: Juniper Mill Carbon Kiln (S2.002/TU4.003)								
Hg	4,386.87	tpy	0.000193	lbs/hr	1.4389	7,456	0.0000	Carbon Kiln emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort Circuit A (S2.004/TU4.004)								
Hg	19.19	tpy	4.71E-07	lbs/hr	0.0016	3,338	0.0000	Retort A emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort Circuit B (S2.005/TU4.005)								
Hg	29.59	tpy	0.00000035	lbs/hr	0.0013	3,731	7.7370	Retort B emissions factor derived from 2013 M29 stack test.
System Description: Sage Mill Autoclave (S2.023/TU4.014)								
Hg	1,966,833.00	tpy	0.0104	lbs/hr	84.7288	8,147	0.0000	Autoclave #1 emissions factor derived from 2013 M29 stack test.
System Description: Sage Mill Autoclave (S2.024/TU4.015)								
Hg	1,946,194.00	tpy	0.00457	lbs/hr	37.2044	8,141	0.0000	Autoclave #2 emissions factor derived from 2013 M29 stack test.
System Description: Electro-winning Cells (TU4.011 - six cells ducted to common stack)								
Hg	86.35	MMgals/yr	0.000146	lbs/hr	1.2825	8,784	0.0000	Electro-winning Cells emissions factor derived from 2013 M29 stack test.
System Description: Juniper Mill Pregnant & Barren Strip Solution Tanks (TU4.006 - TU4.008)								
Hg	86.35	MMgals/yr	0.00108	lbs/hr	9.4867	8,784	0.0000	Preg./Barren Tanks emissions factor derived from 2013 M29 stack test.
System Description: Pinon Mill Pregnant & Barren Strip Solution Tanks (TU4.012 & TU4.013)								
Hg	64.39	MMgals/yr	0.00118	lbs/hr	10.3651	8,784	0.0000	Preg./Barren Tanks emissions factor derived from 2013 M29 stack test.
System Description: Laboratory Sample Prep. Room, Fire Assay Room, Wet Lab Room, Slurry Prep. Room, LECO Room, Instrumentation Room, Met Lab Room & Autoclave Room								
Hg					3.9471		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		434.3715		8.9100	CY2006 Co-product: 17,820 lbs/yr
			CY2007 Facility Total:		929.9303		13.2160	CY2007 Co-product: 26,432 lbs/yr.
			CY2008 Facility Total:		1,679.1864		8.8000	CY2008 Co-product: 17,600 lbs/yr.
			CY2009 Facility Total:		425.7559		5.9080	CY2009 Co-product: 11,816 lbs/yr.
			CY2010 Facility Total:		178.8392		5.4670	CY2010 Co-product: 10,934 lbs/yr.
			CY2011 Facility Total:		452.1731		3.9940	CY2011 Co-product: 7,988.00 lbs/yr.
			CY2012 Facility Total:		695.2002		4.6530	CY2012 Co-product: 9,308.20 lbs/yr.
			CY2013 Facility Total:		148.5169		7.7370	CY2013 Co-product: 15,474.00 lbs/yr.
Source: Queenstake Resources USA, Inc. - Jerritt Canyon Mine: AQOP AP1041-0778; MOPTC AP1041-2217								
System Description: West Roaster Process (S2.036 & PF1.213/TU4.001)								
Hg	587,449.00	tpy	0.002231	lbs/hr	15.1195	6,777	0.0000	Roaster emissions factor derived from average of 2013 M29 stack tests.
System Description: East Roaster Process (S2.041 & PF1.214/TU4.002)								
Hg	592,996.00	tpy	0.001027	lbs/hr	7.0041	6,820	0.0000	Roaster emissions factor derived from average of 2013 M29 stack tests.
System Description: Ore Dryer (S2.026/TU4.003)								
Hg	1,047,503.00	tpy	0.0000562	lbs/hr	0.3189	5,675	0.0000	Ore Dryer emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retort (S2.051/TU4.004)								
Hg	2.67	tpy	0.000242	lbs/hr	0.6459	2,669	2.5600	Retort emissions factor derived from 2013 M29 stack test.
System Description: Refining Process Induction Furnace (S2.050/TU4.005)								
Hg	11.25	tpy	0.00274	lbs/hr	1.3775	503	0.0000	Furnace emissions factor derived from 2013 M29 stack test.
System Description: Laboratory Units Including Large Ore Drying Ovens (5 Units) and Electro-winning Cells								
Hg					2.1363		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		293.9245		2.9600	CY2006 Co-product: 5,920 lbs/yr.
			CY2007 Facility Total:		1,966.3934		1.0200	CY2007 Co-product: 2,040 lbs/yr.
			CY2008 Facility Total:		219.9723		0.7100	CY2008 Co-product: 1,420 lbs/yr.
			CY2009 Facility Total:		138.9704		2.1000	CY2009 Co-product: 4,200 lbs/yr.
			CY2010 Facility Total:		34.9527		11.0380	CY2010 Co-product: 22,076 lbs/yr.
			CY2011 Facility Total:		69.8714		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		29.8595		1.5200	CY2012 Co-product: 3,040.00 lbs/yr.
			CY2013 Facility Total:		26.6023		2.5600	CY2013 Co-product: 5,120.00 lbs/yr.
Source: Newmont Mining Corporation - Gold Quarry: AQOP AP1041-0793; MOPTC AP1041-2219								
System Description: Mill 6 Static Separator (Double Rotator Air Pre-Heater: S2.120/TU4.001)								
Hg	336,289.00	tpy	0.000316	lbs/hr	2.4114	7,631	0.0000	Static Separator emissions factor derived from 2013 M29 stack test.
System Description: CFB North and South Ore Preheaters (S2.126 & S2.129/ TU4.002 & TU4.003)								
Hg	3,549,679.00	tpy	0.00407	lbs/hr	31.8722	7,831	0.0000	Ore Preheater's emissions factor derived from 2013 M29 stack test.

System Description: CFB North and South Ore Roasters (S2.133 & S2.145/TU4.004 & TU4.005)								
Hg	3,549,679.00	tpy	0.000244	lbs/hr	1.9108	7,831	0.0000	Ore Roaster's factor derived from 2013 M29 stack test.
System Description: ROTP North Calcine Quench Circuit (S2.158 & S2.159/TU4.006 - TU4.009)								
Hg	1,642,392.00	tpy	0.001238	lbs/hr	9.6948	7,831	0.0000	North Quench Circuit emissions factor derived from 2013 M29 stack test.
System Description: ROTP South Calcine Quench Circuit (S2.160 & S2.161/TU4.010 - TU4.013)								
Hg	1,907,288.00	tpy	0.00157	lbs/hr	12.2036	7,773	0.0000	South Quench Circuit emissions factor derived from 2013 M29 stack test.
System Description: AARL Carbon Stripping Circuit (Pregnant Tanks: TU4.014 & TU4.015)								
Hg	13,981.50	tpy	0.000636	lbs/hr	5.3100	8,349	0.0000	Pregnant Strip Tanks emissions factor derived from 2013 M29 stack test.
System Description: Refinery Barren Tank & Electro-winning Cells (TU4.016 & TU4.017)								
Hg	41,065,767.00	gals/yr	0.000338	lbs/hr	2.5300	7,485	0.0000	Barren Tank/EW Cells emissions factor derived from 2013 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.041 - S2.046/TU4.018 - TU4.023)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Units were decommissioned in May, 2012.
System Description: Electric Refinery Induction Furnaces (S2.047 - S2.049/TU4.024 - TU4.026)								
Hg	72.80	tpy	0.014999	lbs/hr	9.3444	623	0.0000	Induction Furnace emissions factor derived from 2013 M29 stack test.
System Description: Carbon Kiln #1 (Zadra Building) Scrubber Stack (S2.056/TU4.027)								
Hg	6,943.50	tpy	0.000285	lbs/hr	2.0269	7,112	0.0000	Kiln Scrubber Stack emissions factor derived from 2013 M29 stack test.
System Description: Carbon Kiln #2 (AARL Building) Scrubber Stack (S2.058/TU4.028)								
Hg	5,888.10	tpy	0.002848	lbs/hr	17.4070	6,112	0.0000	Kiln Scrubber Stack emissions factor derived from 2013 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.225/TU4.029)								
Hg	28.70	tpy	0.0000001	lbs/hr	0.0002	2,045	4.3200	Retort Circuit emissions factor derived from 2013 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.226/TU4.030)								
Hg	23.20	tpy	6.87E-08	lbs/hr	0.0001	1,637	0.0000	Retort Circuit emissions factor derived from 2013 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.227/TU4.031)								
Hg	8.40	tpy	1.82E-07	lbs/hr	0.0001	628	0.0000	Retort Circuit emissions factor derived from 2013 M29 stack test.
System Description: Assay Laboratory, Met Laboratory & Integrated Laboratory								
Hg					1.9230		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		310.6937		2.7200	CY2006 Co-product: 5,440 lbs/yr.
			CY2007 Facility Total:		504.4204		6.1600	CY2007 Co-product: 12,320 lbs/yr.
			CY2008 Facility Total:		422.4137		6.7700	CY2008 Co-product: 13,540 lbs/yr.
			CY2009 Facility Total:		280.6857		5.3900	CY2009 Co-product: 10,780 lbs/yr.
			CY2010 Facility Total:		397.1321		5.7000	CY2010 Co-product: 11,400 lbs/yr.
			CY2011 Facility Total:		222.6075		3.8500	CY2011 Co-product: 7,700.00 lbs/yr.
			CY2012 Facility Total:		231.8539		7.6100	CY2012 Co-product: 15,220.00 lbs/yr.
			CY2013 Facility Total:		96.6344		4.3200	CY2013 Co-product: 8,640.00 lbs/yr.
Source: Newmont Mining Corporation - Midas Operations: AQOP AP1041-0766.01; MOPTC AP1041-2253								
System Description: Refinery Furnace #1 (S2.035/TU4.001)								
Hg	82.07	tpy	0.00873	lbs/hr	6.0237	690	0.0000	Furnace #1 emissions factor derived from 2012 M29 stack test.
System Description: Refinery Furnace #2 (S2.036/TU4.002)								
Hg	66.63	tpy	0.0152	lbs/hr	8.4664	557	0.0000	Furnace #2 emissions factor derived from 2012 M29 stack test.
System Description: Retort A (S2.037/TU4.003)								
Hg	70.98	tpy	0.0000121	lbs/hr	0.0252	2,080	0.0000	Retort A emissions factor derived from May 2013 M29 stack test.
System Description: Retort B (S2.038/TU4.004)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort B decommissioned in July, 2012.
System Description: Retort C (S2.052/TU4.005)								
Hg	70.39	tpy	0.00000358	lbs/hr	0.0069	1,932	0.0059	Retort C emissions factor derived from 2012 M29 stack test.
System Description: Assay Laboratory								
Hg				lbs/hr	1.8326		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		17.1801		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		4.2457		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		41.3420		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		6.4395		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		14.2333		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		32.0815		0.0099	CY2011 Co-product: 19.87 lbs/yr.
			CY2012 Facility Total:		21.8322		0.0100	CY2012 Co-product: 10.40 lbs/yr.
			CY2013 Facility Total:		16.3548		0.0059	CY2013 Co-product: 11.8965 lbs/yr.
Source: Barrick, Bald Mountain Mine - Huntington Valley/Mooney Basin: AQOP AP1041-1362; MOPTC AP1041-2246								
System Description: Propane Fired Carbon Regeneration Kiln (S2.001/TU4.001)								
Hg	0.00	tpy		lbs/hr	0.0000	0	0.0000	Carbon Kiln decommissioned in May, 2012.
System Description: Propane Fired Mercury Retort (S2.002/TU4.002)								
Hg	0.00	tpy		lbs/hr	0.0000	0	0.0000	Retort decommissioned in May, 2012.
System Description: Propane Fired Bullion Furnace (S2.003/TU4.003)								
Hg	0.00	tpy		lbs/hr	0.0000	0	0.0000	Bullion Furnace decommissioned in May, 2012.
System Description: Electro-winning Circuit (IA1.024/TU4.004) and Barren Strip Solution Tank (TU4.005)								

Hg	0.00	gals/yr		lbs/hr	0.0000	0	0.0000	EW Circuit decommissioned in May, 2012.
System Description: Assay Laboratory								
Hg					3.6439		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Review.
			CY2006 Facility Total:		204.3025		2.9400	CY2006 Co-product: 5,880 lbs/yr.
			CY2007 Facility Total:		57.4138		2.2750	CY2007 Co-product: 4,550 lbs/yr.
			CY2008 Facility Total:		278.3220		2.6000	CY2008 Co-product: 5,200 lbs/yr.
			CY2009 Facility Total:		5.8995		1.5600	CY2009 Co-product: 3,120 lbs/yr.
			CY2010 Facility Total:		7.8188		1.4300	CY2010 Co-product: 2,860 lbs/yr.
			CY2011 Facility Total:		3.2198		1.6100	CY2011 Co-product: 3,220.00 lbs/yr.
			CY2012 Facility Total:		3.1464		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		3.6439		0.0000	CY2013 Co-product: 0.00 lbs/yr.
Source: Rawhide Mining, LLC (formerly Kennecott Rawhide Mining Company - Denton-Rawhide Mine): AQOP AP1041-1116.02; OPTC AP1041-2975; MOPTC AP1041-2245								
System Description: Carbon Regeneration Kiln (S2.001/TU4.001)								
Hg	216.84	tpy	2.38E-07	lbs/hr	0.0016	6,571	0.0000	Carbon Kiln emissions factor derived from 2013 M29 stack test.
System Description: Electro-winning Circuit (IA3.007/TU4.002)								
Hg	Not Reported	gals/yr	0.0000108	lbs/hr	0.0341	3,155	0.0000	Electro-winning Cells emissions factor derived from 2013 M29 stack test.
System Description: Refinery Induction Furnace (S2.004/TU4.003)								
Hg	69.40	tpy	0.0000122	lbs/hr	0.0120	987	0.0000	Refinery Furnace emissions factor derived from 2013 M29 stack test.
System Description: System 1 - Mercury Retort (System 2 - S2.002)								
Hg	37.87	tpy	0.00000214	lbs/hr	0.0124	5,801	0.1270	Retort emissions factor derived from 2013 M29 stack test.
System Description: Fire Assay Laboratory								
Hg					0.0142		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		351.5928		0.0621	CY2006 Co-product: 124.20 lbs/yr.
			CY2007 Facility Total:		39.5645		0.0276	CY2007 Co-product: 55.20 lbs/yr.
			CY2008 Facility Total:		13.0908		0.0262	CY2008 Co-product: 52.40 lbs/yr.
			CY2009 Facility Total:		12.0029		0.0258	CY2009 Co-product: 51.60 lbs/yr.
			CY2010 Facility Total:		37.6433		0.0079	CY2010 Co-product: 15.80 lbs/yr.
			CY2011 Facility Total:		78.5131		0.0230	CY2011 Co-product: 46.00 lbs/yr.
			CY2012 Facility Total:		7.1176		0.0249	CY2012 Co-product: 49.80 lbs/yr.
			CY2013 Facility Total:		0.0743		0.1270	CY2013 Co-product: 254.00 lbs/yr.
Source: Hycroft Resources & Development, Inc. - Crofoot/Lewis Project: AQOP AP1041-0334.02; MOPTC AP1041-2255								
System Description: Mercury Retort #1 (TU4.001)								
Hg	Not Reported	tpy	0.00000149	lbs/hr	0.0094	6,299	27.6700	Retort emissions factor derived from 2012 M29 stack test. See CO 2013-09.
System Description: Smelting Furnace (TU4.002)								
Hg	Not Reported	tpy	0.00000933	lbs/hr	0.0266	2,852	0.0000	Furnace emissions factor derived from 2012 M29 stack test. See CO2013-09.
System Description: Mercury Retort #2 (TU4.003)								
Hg	Not Reported	tpy	0.00000523	lbs/hr	0.0184	3,521	0.0000	Retort emissions factor derived from 2013 M29 stack test.
System Description: Assay Laboratory								
Hg					4.4415		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.0000		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.5299		0.8000	CY2009 Co-product: 1,600 lbs/yr.
			CY2010 Facility Total:		4.5219		4.2000	CY2010 Co-product: 8,400 lbs/yr.
			CY2011 Facility Total:		4.5242		23.0700	CY2011 Co-product: 46,147 lbs/yr.
			CY2012 Facility Total:		4.4784		34.0200	CY2012 Co-product: 68,047 lbs/yr.
			CY2013 Facility Total:		4.4959		27.6700	CY2013 Co-product: 55,340.00 lbs/yr.
Source: Waterton Global Mining Company, LLC (formerly Antler Peak Gold, Inc., formerly Metallic Ventures, Inc.): AQOP AP1041-3127; OPTC AP1041-2853; MOPTC AP1041-2248								
System Description: Carbon Regeneration Kiln, Solution Tanks & Electro-winning Circuit (TU4.001 - TU4.003 & TU4.006)								
Hg		tpy		lbs/hr	0.0000		0.0000	System did not operate in 2013, under construction.
System Description: Mercury Retorts, Solution Tanks & Electro-winning Circuit (TU4.002 - TU4.006)								
Hg		tpy		lbs/hr	0.0000		0.0000	System did not operate in 2013, under construction.
System Description: Dore Furnace, Solution Tanks & Electro-winning Circuit (TU4.002, TU4.003, TU4.006 & TU4.007)								
Hg	17.59	tpy	0.000009	lbs/hr	0.0200	2,226	0.0000	Source failed to test in 2013, used permitted flow and default permit limit to calculate emissions.
System Description: Assay Laboratory								
Hg					0.0076		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.2838		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		0.2838		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		0.0222		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		0.0022		0.0000	CY2011 Co-product: 0.00 lbs/yr.

			CY2012 Facility Total:	3.7066			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	0.0276			0.0000	CY2013 Co-product: 0.00 lbs/yr.
Source: Coeur D'Alene Mining Corporation - Coeur Rochester Mine: AQOP AP1044-0063.02; MOPTC AP1041-2242								
System Description: Refinery Furnace (TU4.001)								
Hg	125.00	tpy	0.00218	lbs/hr	0.7434	341	0.0000	Refinery Furnace emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retorts (TU4.002 & TU4.003)								
Hg	238.00	tpy	0.00000395	lbs/hr	0.0140	3,532	14.5000	Retort emissions factor derived from 2013 M29 stack test.
System Description: Assay Laboratory								
Hg					1.8805		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	2.8872			16.1000	CY2006 Co-product: 32,200 lbs/yr.
			CY2007 Facility Total:	137.0958			15.4000	CY2007 Co-product: 30,800 lbs/yr.
			CY2008 Facility Total:	9.9144			15.6000	CY2008 Co-product: 31,200 lbs/yr.
			CY2009 Facility Total:	4.4097			10.7000	CY2009 Co-product: 21,400 lbs/yr.
			CY2010 Facility Total:	2.6426			12.3000	CY2010 Co-product: 24,600 lbs/yr.
			CY2011 Facility Total:	3.3523			11.2000	CY2011 Co-product: 22,400 lbs/yr.
			CY2012 Facility Total:	3.2552			20.4000	CY2012 Co-product: 40,800 lbs/yr.
			CY2013 Facility Total:	2.6378			14.5000	CY2013 Co-product: 29,000.00 lbs/yr.
Source: Newmont Mining Corporation - Lone Tree Mine: AQOP AP1041-0059; MOPTC AP1041-2251								
System Description: Electro-winning Cells (East Stack)								
Hg	0.00	gals/yr		lbs/hr	0.0000	0	0.0000	EW Cells were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Electro-winning Cells (West Stack)								
Hg	0.00	gals/yr		lbs/hr	0.0000	0	0.0000	EW Cells were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Electro-winning Cells (Scavenger Stack)								
Hg	0.00	gals/yr		lbs/hr	0.0000	0	0.0000	EW Cells were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Pregnant and Barren Solution Tanks								
Hg	0.00	tpy - carbon		lbs/hr	0.0000	0	0.0000	P/B Tanks were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Sample Room, Fire Assay Room, Wet Laboratory, LECO Laboratory, Met Laboratory								
Hg					1.8788		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	622.1013			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	148.0964			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	67.1251			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	7.2136			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	3.0212			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	1.8788			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	1.8788			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	1.8788			0.0000	CY2013 Co-product: 0.00 lbs/yr.
Source: Barrick Cortez, Inc. - Cortez Hills and Pipeline Projects: AQOP AP1041-2141; MOPTC AP1041-2220								
System Description: Refinery Induction Furnace #1 (S2.002/TU4.003)								
Hg	48.00	tpy		lbs/hr	0.0000	453	0.0000	Ref. Furn. #1 ducted in-line with Retorts, see Retorts for reported emissions.
System Description: Refinery Induction Furnace #2 (S2.003/TU4.004)								
Hg	2.80	tpy		lbs/hr	0.0000	138	0.0000	Ref. Furn. #2 ducted in-line with Retorts, see Retorts for reported emissions.
System Description: Electric Carbon Reactivation Kiln #1 (S2.007/TU4.005)								
Hg	32.00	tpy	0.0000441	lbs/hr	0.0033	74	0.0000	Carbon Kiln #1 emissions factor derived from 2013 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #2 (S2.008/TU4.006)								
Hg	116.00	tpy	0.0000657	lbs/hr	0.0155	236	0.0000	Carbon Kiln #2 emissions factor derived from 2013 M29 stack test.
System Description: East Electro-winning Cells (IA1.096/TU4.001)								
Hg	14,110,710.00	gals/yr	0.00134	lbs/hr	11.1642	8,332	0.0000	EW Cells emissions factor derived from 2013 M29 stack test.
System Description: West Electro-winning Cells (IA1.097/TU4.002)								
Hg	20,192,191.40	gals/yr	0.000352	lbs/hr	2.7172	7,719	0.0000	EW Cells emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retorts (TU4.010 & TU4.011)								
Hg	Avg. 25.2	tpy	0.00000435	lbs/hr	0.0105	2,420	2.2740	Retort emissions factor derived from 2013 M29 stack tests with both retorts operating. Retort #1 operated 2,420 hrs. & Retort #2 operated 2,180 hrs.
System Description: Pregnant and Barren Strip Solution Tanks (TU4.008 & TU4.009)								
Hg		gals/yr		lbs/hr	0.0000		0.0000	Preg./Barren Tanks ducted in-line to East Electro-winning Circuit.
System Description: Assay Laboratory (Analytical Lab Building), Met Laboratory, Strip Circuit Area (Mill Building), Refinery Gold Sludge Drying Oven, Fire Assay Fusion Furnaces								
Hg					1.8530		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	166.7059			0.1200	CY2006 Co-product: 240 lbs/yr.
			CY2007 Facility Total:	208.0466			0.3200	CY2007 Co-product: 640 lbs/yr.
			CY2008 Facility Total:	75.8638			0.0000	CY2008 Co-product: 0.00 lbs/yr.

			CY2009 Facility Total:	1.3905			0.0170	CY2009 Co-product: 34 lbs/yr.
			CY2010 Facility Total:	5.1862			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	5.1815			0.7200	CY2011 Co-product: 1,441 lbs/yr.
			CY2012 Facility Total:	4.2156			1.2100	CY2012 Co-product: 2,412 lbs/yr.
			CY2013 Facility Total:	15.7637			2.2740	CY2013 Co-product: 4,458.00 lbs/yr.
Source: Florida Canyon Mining, Inc. - Florida Canyon Mine: AQOP AP1041-0106.02; MOPTC AP1041-2256								
System Description: Mercurt Retort A (S2.003/TU4.004)								
Hg	3.11	tpy	2.48E-07	lbs/hr	0.0000	201	0.0000	Retort A emissions factor derived from...
System Description: Mercurt Retort B (S2.004/TU4.005)								
Hg	9.46	tpy	1.93E-07	lbs/hr	0.0002	854	0.7250	Retort B emissions factor derived from...
System Description: Electro-winning Cell A (TU4.002)								
Hg		tpy		lbs/hr	0.0000		0.0000	Electro-winning Cell A moved to De Minimis Designation 10/21/13.
System Description: Electro-winning Cell B (TU4.003)								
Hg		tpy		lbs/hr	0.0000		0.0000	Electro-winning Cell B moved to De Minimis Designation 10/21/13.
System Description: Carbon Regeneration Kiln (S2.007/TU4.008)								
Hg	21.48	tpy	0.000399	lbs/hr	1.2457	3,122	0.0000	Carbon Kiln emissions factor derived from...
System Description: Dore Furnace (S2.005/TU4.001)								
Hg		tpy		lbs/hr	0.0000		0.0000	Dore Furnace moved to De Minimis Designation 10/21/13.
System Description: Pregnant Tank (TU4.006)								
Hg		hrs/yr		lbs/hr	0.0000		0.0000	Pregnant Tank moved to De Minimis Designation 12/17/09.
System Description: Barren Tank (TU4.007)								
Hg		hrs/yr		lbs/hr	0.0000		0.0000	Barren Tank moved to De Minimis Designation 12/17/09.
System Description: Assay Laboratory, Electro-winning Cells, Pregnant & Barren Tanks and Dore Furnace.								
Hg					2.9861		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	440.7382			0.2264	CY2006 Co-product: 452.80 lbs/yr.
			CY2007 Facility Total:	19.0000			0.0072	CY2007 Co-product: 14.40 lbs/yr.
			CY2008 Facility Total:	162.3117			0.2875	CY2008 Co-product: 575 lbs/yr.
			CY2009 Facility Total:	49.6118			0.8120	CY2009 Co-product: 1,624 lbs/yr.
			CY2010 Facility Total:	111.8133			0.3090	CY2010 Co-product: 618 lbs/yr.
			CY2011 Facility Total:	51.7290			1.2700	CY2011 Co-product: 2,538 lbs/yr. (1,829.00 "liquid"; 709.00 sludge)
			CY2012 Facility Total:	8.2449			0.6300	CY2012 Co-product: 1,252 lbs/yr. (892.00 "liquid"; 360.00 sludge)
			CY2013 Facility Total:	4.2320			0.7250	CY2013 Co-product: 1,450.00 lbs/yr.
Source: Round Mountain Gold Corporation - Smoky Valley Common Operation: AQOP AP1041-0444.01; MOPTC AP1041-2250								
System Description: RMG Carbon Reactivation Kiln (S2.121/TU4.001)								
Hg	1,829.00	tpy	0.00000929	lbs/hr	0.0814	8,760	0.0000	Carbon Kiln emissions factor derived from average of 2013 M29 stack tests.
System Description: RMG Pregnant Strip Solution Tank (TU4.002: Shares a common stack with S2.121/TU4.001)								
Hg	Not Reported	gals/min	0	lbs/hr	0.0000	0	0.0000	The Pregnant Strip Solution Tank and both Barren Strip Solution Tanks are vented to a common stack with the Carbon Kiln. Therefore, the emissions factor is for all four units running simultaneously and emissions are calculated using the highest hours of operations value of the four units. The Carbon Kiln actually operated 5,365 hours for the year with the remaining units operating 8,760 each.
System Description: RMG Barren Strip Solution Tank #1 (TU4.003: Shares a common stack with S2.121/TU4.001)								
Hg	Not Reported	gals/min	0	lbs/hr	0.0000	0	0.0000	
System Description: RMG Barren Strip Solution Tank #2 (TU4.004: Shares a common stack with S2.121/TU4.001)								
Hg	Not Reported	gals/min	0	lbs/hr	0.0000	0	0.0000	
System Description: RMG Electric Induction Furnace (S2.130/TU4.005)								
Hg	25.00	tpy	0.00263	lbs/hr	1.1230	427	0.0000	Furnace emissions factor derived from average of 2013 M29 stack tests.
System Description: GH Carbon Reactivation Kiln (S2.157/TU4.006)								
Hg	674.00	tpy	0.00000116	lbs/hr	0.0038	3,233	0.0000	Carbon Kiln emissions factor derived from 2013 M29 stack test.
System Description: GH Electro-winning Circuit & Pregnant/Barren Strip Solution Tanks (S2.158 - S2.160/TU4.007 - TU4.009)								
Hg	16,407,030.00	gals/yr	0.0000655	lbs/hr	0.3678	5,615	0.0000	Electro-winning Cells emissions factor derived from 2013 M29 stack test.
System Description: GH Mercury Retort (S2.161/TU4.010)								
Hg	12.00	tpy	9.18E-08	lbs/hr	0.0001	1,143	0.3150	Retort emissions factor derived from 2013 M29 stack test.
System Description: GH Smelting Furnace (S2.162/TU4.011)								
Hg	12.00	tpy	0.0000045	lbs/hr	0.0017	386	0.0000	Smelting Furnace emissions factor derived from 2013 M29 stack test.
System Description: RMG Refinery Electro-winning Vent & Ovens, Assay Laboratory Ovens.								
Hg					3.1278		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	57.0585			0.0085	CY2006 Co-product: 17 lbs/yr.
			CY2007 Facility Total:	59.6652			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	8.3173			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	4.5878			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	4.4525			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	6.6374			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	4.1960			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	4.7056			0.3150	CY2013 Co-product: 629.90 lbs/yr.
Source: Homestake Mining Company of California - Ruby Hill Mine: AQOP AP1041-0713.01; MOPTC AP1041-2252								
System Description: Electric Carbon Regeneration Kiln (S2.019/TU4.001)								

Hg		tpy		lbs/hr	0.0000		0.0000	Carbon Kiln was decommissioned 04/25/11 and did not operate in 2013.	
System Description: Electric Mercury Retort (S2.022/TU4.003)									
Hg		tpy		lbs/hr	0.0000		0.0000	Retort was decommissioned 04/25/11 and did not operate in 2013.	
System Description: Electric Refinery Induction Furnace (S2.013/TU4.002)									
Hg		tpy		lbs/hr	0.0000		0.0000	Furnace was decommissioned 04/25/11 and did not operate in 2013.	
System Description: Electro-winning Cells 1 & 2 (IA1.005/TU4.004) and Pregnant and Barren Strip Solution Tanks (TU4.005)									
Hg		gals/yr		lbs/hr	0.0000		0.0000	EW Circuit was decommissioned 04/25/11 and did not operate in 2013.	
System Description: Assay Laboratory									
Hg					1.3818		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
					CY2006 Facility Total: 28.7825		0.5000	CY2006 Co-product: 1,000 lbs/yr.	
					CY2007 Facility Total: 35.2201		0.3800	CY2007 Co-product: 760 lbs/yr.	
					CY2008 Facility Total: 1.3883		0.2400	CY2008 Co-product: 480 lbs/yr.	
					CY2009 Facility Total: 7.2874		0.1762	CY2009 Co-product: 352.40 lbs/yr.	
					CY2010 Facility Total: 34.4158		0.0000	CY2010 Co-product: 0.00 lbs/yr.	
					CY2011 Facility Total: 11.1401		0.0495	CY2011 Co-product: 99 lbs/yr.	
					CY2012 Facility Total: 1.3818		0.0000	CY2012 Co-product: 0.00 lbs/yr.	
					CY2013 Facility Total: 1.3818		0.0000	CY2013 Co-product: 0.00 lbs/yr.	
Source: Marigold Mining Company - Marigold Mine: AQOP AP1041-0158.02; MOPTC AP1041-2254									
System Description: Carbon Regeneration Kiln (S2.013A/TU4.001)									
Hg	571.30	tpy		1.545E-06	lbs/hr	0.0037	2,365	0.0000	Carbon Kiln emissions factor derived from average of 2013 M29 stack tests.
System Description: Mercury Retort (S2.014/TU4.002)									
Hg	8.80	tpy	0.00074745		lbs/hr	0.7472	1,000	0.4765	Retort emissions factor derived from average of 2013 M29 stack tests.
System Description: Tilting Crucible Furnace (S2.015/TU4.003)									
Hg	6.30	tpy		0.000485	lbs/hr	0.1030	212	0.0000	Furnace emissions factor derived from average of 2013 M29 stack tests.
System Description: Electro-winning Circuit (TU4.004)									
Hg	42,484.00	tpy	0.00074745		lbs/hr				Electro-winning Cells emissions factor derived from average of 2013 M29 stack tests. Pregnant and Barren Strip Solution Tanks vented to a common stack with Electro-winning Cells, therefore, emissions factor is for all three units.
System Description: Pregnant Strip Solution Tank (TU4.005)									
Hg	See Above	tpy		See Above	lbs/hr				
System Description: Barren Strip Solution Tank (TU4.006)									
Hg	See Above	tpy		See Above	lbs/hr	4.6550	6,228	0.0000	
System Description: Assay Laboratory									
Hg					2.0489			0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total: 908.0610		0.1675	CY2006 Co-product: 335 lbs/yr.	
					CY2007 Facility Total: 5.2255		0.2450	CY2007 Co-product: 490 lbs/yr.	
					CY2008 Facility Total: 10.4883		0.5690	CY2008 Co-product: 1,138 lbs/yr.	
					CY2009 Facility Total: 4.4540		0.8160	CY2009 Co-product: 1,632 lbs/yr.	
					CY2010 Facility Total: 9.3695		1.0330	CY2010 Co-product: 2,066 lbs/yr.	
					CY2011 Facility Total: 11.1707		1.0500	CY2011 Co-product: 2,100 lbs/yr.	
					CY2012 Facility Total: 2.1159		1.4600	CY2012 Co-product: 2,927 lbs/yr.	
					CY2013 Facility Total: 7.5577		0.4765	CY2013 Co-product: 953.00 lbs/yr.	
Source: Borealis Mining Company: AQOP AP1041-2125; MOPTC AP1041-2228									
System Description: Deep Bed Carbon Scrubber: Carbon Regeneration Kiln									
Hg	24.00	tpy		0.0000174	lb/hr	0.0100	576	0.0000	Carbon Kiln emissions factor derived from 2013 M29 stack test.
System Description: Deep Bed Carbon Scrubber: Mercury Retort									
Hg	2.06	tpy	0.00000416		lb/hr	0.0016	385	0.1640	Retort emissions factor derived from 2013 M29 stack test.
System Description: Deep Bed Carbon Scrubber: Smelting Furnace									
Hg	1.08	tpy		0.000118	lb/hr	0.0070	59	0.0000	Furnace emissions factor derived from 2013 M29 stack test.
System Description: Deep Bed Carbon Scrubber: Solutions Circuit									
Hg	21.58	tpy	0.00000416		lb/hr	0.0168	4,028	0.0000	Solutions Circuit emissions factor derived from 2013 M29 stack test.
					CY2006 Facility Total: 0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.	
					CY2007 Facility Total: 0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.	
					CY2008 Facility Total: 0.0000		0.0000	CY2008 Co-product: 0.00 lbs/yr.	
					CY2009 Facility Total: 0.0000		0.0000	CY2009 Co-product: 0.00 lbs/yr.	
					CY2010 Facility Total: 0.0000		0.0000	CY2010 Co-product: 0.00 lbs/yr.	
					CY2011 Facility Total: 0.0000		0.0000	CY2011 Co-product: 0.00 lbs/yr.	
					CY2012 Facility Total: 12.0456		0.0000	CY2012 Co-product: 0.00 lbs/yr.	
					CY2013 Facility Total: 0.0353		0.1640	CY2013 Co-product: 327.50 lbs/yr.	
Source: Barrick Turquoise Ridge, Inc. - Getchell Mine: AQOP AP1041-0292.01; MOPTC AP1041-2249									
System Description: Assay/Met Laboratory									
Hg					4.9462			0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total: 10.6752		0.0000	CY2006 Co-product: 0.00 lbs/yr.	
					CY2007 Facility Total: 4.9660		0.0000	CY2007 Co-product: 0.00 lbs/yr.	
					CY2008 Facility Total: 4.9462		0.0000	CY2008 Co-product: 0.00 lbs/yr.	

			CY2006 Facility Total:	0.0000			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	4.1040			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	4.1040			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	4.1040			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	4.1040			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	4.1040			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	4.4661			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	4.4661			0.0000	CY2013 Co-product: 0.00 lbs/yr.
Source: Newmont Mining Corporation - Phoenix Mine: AQOP AP1041-0220.02; MOPTC AP1041-2247								
System Description: Electric Carbon Regeneration Kiln (S2.002/TU4.001)								
Hg	2,270.00	tpy	0.000028	lbs/hr	0.0106	3,783	0.0000	Carbon Kiln emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort (S2.014/TU4.002)								
Hg	26.00	tpy	0.00007	lbs/hr	0.1636	2,337	0.0300	Retort emissions factor derived from 2013 M29 stack test.
System Description: Pregnant & Barren Tanks, Electro-winning Cells, Drying Oven and 2 AA Units. SXEW EW Cells and Metallurgical Lab DM status pending determination.								
Hg					0.3673		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	2.3061			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	0.4579			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	0.8053			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	1.3102			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	0.3835			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	0.3749			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	0.3724			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	0.5415			0.0300	CY2013 Co-product: 60.00 lbs/yr.
Source: Barrick Goldstrike Mines, Inc.: AQOP AP1041-0739.01; MOPTC AP1041-2221								
System Description: North Roaster Mill Circuit #1 Air Pre-Heater and Dry Grinding Process (S2.204 & S2.205.01 - S2.205.12/TU4.001)								
Hg	2,579,797.00	tpy	0.000534	lbs/hr	3.861888	7,232	0.0000	Mill Circuit #1 emissions factor derived from 2013 M29 stack tests.
System Description: South Roaster Mill Circuit #2 Air Pre-Heater and Dry Grinding Process (S2.206 & S2.207.01 - S2.207.12/TU4.002)								
Hg	2,618,530.00	tpy	0.000727	lbs/hr	5.459043	7,509	0.0000	Mill Circuit #2 emissions factor derived from 2013 M29 stack test.
System Description: Roasters #1 & #2 (S2.209.1 & S2.209.2/TU4.003 & TU4.004)								
Hg	5,447,941.00	tpy	0.0334	lbs/hr	246.8928	7,392	0.0000	Roaster Circuit emissions factor derived from 2013 M29 stack test. Testing was conducted during dual Roaster operations. Annual hours operated is the average of individual Roaster operations. Roaster #1 operated 7,369 hrs/yr, Roaster #2 operated 7,415 hrs/yr.
System Description: North Roaster Circuit #1 Quenching Process (S2.210/TU4.005)								
Hg	2,807,365.00	tpy	0.00241	lbs/hr	17.75929	7,369	0.0000	Quench Circuit #1 emissions factor derived from 2013 M29 stack test.
System Description: South Roaster Circuit #2 Quenching Process (S2.211/TU4.006)								
Hg	2,640,576.00	tpy	0.00335	lbs/hr	24.84025	7,415	0.0000	Quench Circuit #2 emissions factor derived from 2013 M29 stack test.
System Description: Analytical Assay Laboratory (S2.051/TU4.007)								
Hg	44.00	tpy	0.000342	lbs/hr	2.9959	8,760	0.0000	Assay Lab emissions factor derived from 2013 M29 stack test.
System Description: Carbon Reactivation Kiln (S2.004.1/TU4.008)								
Hg	8,713.00	tpy	0.0000346	lbs/hr	0.2253	6,511	0.0000	Carbon Kiln emissions factor derived from 2013 M29 stack test.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit A (TU4.009 & TU4.011)								
Hg	Not Reported	gals/yr	0.000169	lbs/hr	0.4815	2,849	0.0000	Preg./Barren Tanks A emissions factor derived from 2013 M29 stack test.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit B (TU4.010 & TU4.012)								
Hg	Not Reported	gals/yr	0.0000549	lbs/hr	0.1480	2,696	0.0000	Preg./Barren Tanks B emissions factor derived from 2013 M29 stack test.
System Description: Autoclave #1 (S2.015/TU4.013)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Acidic Operation Autoclave #1 did not operate in acidic mode during 2013.
System Description: Autoclave #1 (S2.015/TU4.013)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Alkaline Operation Autoclave #1 did not operate in alkaline mode during 2013.
System Description: Autoclaves #2 & 3 (S2.016 & S2.017/TU4.014 & TU4.015)								
Hg	1,062,045.00	tpy	0.000903	lbs/hr	3.9317	4,354	0.0000	Acidic Operation Autoclaves #2 & 3 emissions factor derived from 2013 M29 stack test. Testing was conducted during dual Autoclave operation and only during acidic operations mode. Annual hours operated is the average of individual Autoclave operations. Autoclave #2 (TU4.014) operated 4,465 hrs/yr; Autoclave #3 (TU4.015) operated 4,242 hrs/yr.
System Description: Autoclaves #2 & 3 (S2.016 & S2.017/TU4.014 & TU4.015)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Alkaline Operation Autoclaves #2 & 3 did not operate in alkaline mode during 2013.
System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018)								
Hg	1,243,823.30	tpy	0.0000558	lbs/hr	0.1811	3,246	0.0000	Acidic Operation Autoclaves #4 - 6 emissions factor derived from 2013 M29 stack test. Testing was conducted during simultaneous operations and only during alkaline operations mode. Annual hours operated is the average of individual Autoclave operations during acidic mode. Autoclave #4 operated 3,294 hours/yr; #5 operated 3,062 hours/yr; and #6 operated 2,754 hrs/yr.

System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018)						Alkaline Operation		
Hg	515,570.20	tpy	0.0000558	lbs/hr	0.0868	1,556	0.0000	Autoclaves #4 - 6 emissions factor derived from 2013 M29 stack test. Testing was conducted during simultaneous operations and only during alkaline operations mode. Annual hours operated is the average of individual Autoclave operations during alkaline mode. Autoclave #4 operated 1,787 hrs/yr; #5 operated 1,381 hrs/yr; and #6 operated 1500 hrs/yr.
System Description: Mercury Retort #1 - Phase 1 Operations (S2.009/TU4.019)								
Hg	17.00	tpy	0.00513	lbs/hr	5.3968	1,052	0.0000	Retort #1 emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort #2 - Phase 1 Operations (S2.010/TU4.020)								
Hg	18.00	tpy	0.00275	lbs/hr	3.0745	1,118	0.0000	Retort#2 emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort #3 - Phase 1 Operations (S2.011/TU4.021)								
Hg	12.00	tpy	0.0094	lbs/hr	8.0464	856	0.0000	Retort #3 emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort #1 - Phase 2 Operations (S2.009/TU4.019)								
Hg	20.00	tpy	7.67E-07	lbs/hr	0.0009	1,140	0.0000	Retort #1 emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort #2 - Phase 2 Operations (S2.010/TU4.020)								
Hg	16.00	tpy	3.07E-07	lbs/hr	0.0003	984	0.0000	Retort#2 emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort #3 - Phase 2 Operations (S2.011/TU4.021)								
Hg	8.00	tpy	9.14E-08	lbs/hr	0.0000	473	0.0000	Retort #3 emissions factor derived from 2013 M29 stack test.
System Description: Mercury Retort #4 (S2.341/TU4.025)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort #4 did not operate in 2013.
System Description: Mercury Retorts #'s 1 - 4 (Cumulative Co-product)								
Hg							50.6700	Cumulative co-product for all four mercury retorts.
System Description: East & West Refinery Furnaces & Electro-winning Cells combined vented through a common carbon filter and stack (S2.013 & S2.014/TU4.022 & TU4.023)								
Hg	70.00	tpy	0.0159	lbs/hr	7.2345	455	0.0000	Furnaces's/EW Cells emissions factor derived from 2013 M29 stack test. Testing was conducted during dual Furnace and EW Cell operations. Annual hours operated is the average of individual Furnace operations. East Furnace (TU4.022) operated 447 hrs/yr; West Furnace (TU4.023) operated 462 hrs/yr.
System Description: Electro-winning Cells only (TU4.024)								
Hg	Not Reported	gals/yr	0.00675	lbs/hr	50.6588	7,505	0.0000	EW Cells emissions factor derived from 2013 M29 stack test while the Furnaces were not operating. Total EW Cell operating hours were 7,959 hrs/yr. Combined Furnace/EW Cell operating hours of 455 hrs/yr. were subtracted from total hours operated to arrive at 7,505 hours of EW Cell operations only.
System Description: Elution Circuit Process Tanks (S2.333.1 - S2.333.8/TU4.026 - TU4.029)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	Elution Circuit Process Tanks did not operate in 2013.
System Description: Resin-In-Leach (RIL) Electro-winning Circuit (S2.342.1 - S2.342.3/TU4.030 - TU4.032)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	RIL Electro-winning Circuit did not operate in 2013.
System Description: Assay, Mill, Mill Met, Autoclave, Autoclave Met and Roaster Pumphouse Laboratories, Strip Circuit Area and Ore Fines Fee System.								
Hg					4.7500		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		616.7650		98.5500	CY2006 Co-product: 197,100 lbs/yr.
			CY2007 Facility Total:		708.6590		58.6300	CY2007 Co-product: 117,260 lbs/yr.
			CY2008 Facility Total:		166.0557		87.3300	CY2008 Co-product: 134,660 lbs/yr.
			CY2009 Facility Total:		369.7831		61.8730	CY2009 Co-product: 123,746 lbs/yr.
			CY2010 Facility Total:		266.9336		60.1080	CY2010 Co-product: 120,216 lbs/yr.
			CY2011 Facility Total:		630.5519		59.9200	CY2011 Co-product: 119,840 lbs/yr.
			CY2012 Facility Total:		334.9836		44.4100	CY2012 Co-product: 88,820 lbs/yr.
			CY2013 Facility Total:		386.0257		50.6700	CY2013 Co-product: 101,340.00 lbs/yr. (x.00 lbs. - calomel; x.00 lbs - elemental).

CY 2013 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
748.63		111.57
Co-product: 223,140.00 lbs/yr		

CY 2012 Cumulative Totals		
CY 2012 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed		

Process Emissions (lbs/yr)		Co-Product (tpy)	to ensure reporting accuracy.
1,393.42		115.95	Co-product: 231,900 lbs/yr

CY 2010 Cumulative Totals			CY 2011 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.
Process Emissions (lbs/yr)		Co-Product (tpy)	
1,607.96		106.77	

CY 2010 Cumulative Totals			CY 2010 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.
Process Emissions (lbs/yr)		Co-Product (tpy)	
1,134.15		101.59	

CY 2009 Cumulative Totals			CY 2009 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. In general, testing went much better in 2009 than in 2008 with far fewer testing irregularities or instances where test results were invalidated.
Process Emissions lbs/yr		Co-Product tpy	
1,336.46		90.18	

Note that the total value is lower than actual industry-wide emissions due to a few thermal units which were unable to test in the reporting year and the absence of 2009 test data for Barrick Goldstrike's autoclaves under alkaline operating conditions. See 2009 Report for details.



CY 2008 Cumulative Totals			CY 2008 process emissions were largely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Some facilities had entire testing events, or in some cases just one or more runs of a test event, invalidated due to irregularities in testing protocol, poor sample handling procedures or laboratory errors. Yukon-Nevada Corporation - Jeritt Canyon Mine (formerly Queenstake Resources) did not test in 2008 due to the temporary NDEP ordered shutdown of the facility.
Process Emissions lbs/yr		Co-Product tpy	
3,165.90		102.93	

CY 2007 Cumulative Totals			CY 2007 process emissions were largely derived using one consistent FRM testing methodology (Method 29) with scattered M101A and OHM results used in lieu of M29 due to test schedule conflicts/logistics issues. Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.
Process Emissions lbs/yr		Co-Product tpy	
4,764.52		97.68	

CY 2006 Cumulative Totals			CY 2006 process emissions and co-product values were accepted "as submitted" due to variability in testing methodology, emission calculation methods and/or the lack of current FRM test results.
Process Emissions lbs/yr		Co-Product tpy	
4,468.15		133.26	